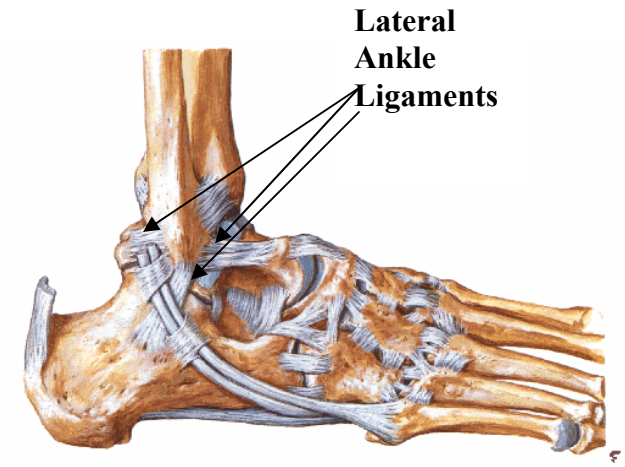
ANKLE SPRAIN

♦ What is it?

An acute ankle sprain involves the stretching and tearing of one or more ligaments in the ankle. Sprains are categorized into three grades: Grade I – mild pain and swelling, and the ligaments are not stretched/torn so that they are lengthened. Grade II – moderate pain and swelling, and the ligaments are stretched some but still function to stabilize the ankle joint. Grade III – severe pain and swelling, and the ligaments are stretched out or torn so that they do not function to stabilized the ankle joint, allowing the ankle joint to be loose or unstable.



♦ Signs and Symptoms of this Condition

- "Pop" or tearing sensation at time of injury
- Pain, tenderness, swelling in the ankle and foot
- Bruising may appear in the area of injury (24-48 hours after injury)
- Pain with moving the ankle
- Pain with putting weight on the injured foot and ankle

♦ Causes

- Usually involves stepping on an uneven surface, hole, or object causing the ankle to turn either inward or outward while the body weight is coming down onto the lower extremity at the same time
- Normally a twisting type of injury

♦ What Can I do to Prevent an Ankle Sprain?

- Adequate warm-up prior to physical activity
- Maintain flexibility through regular stretching (although recent research does show any reduction in injury rates when stretching is performed immediately prior to strenuous physical activity)
- Taping, bracing, or wearing high-top shoes may be helpful in preventing injuries in high intensity sports
- Wearing the proper type of shoe for the sport (i.e. Do NOT wear jogging shoes for playing court sports such as basketball, volleyball, racquetball, etc. as they have increased height due to the shock absorbing material to reduce the impact of jogging. This reduces stability during quick lateral motions (cutting, stopping, starting, and side shuffling).

♦ Prognosis

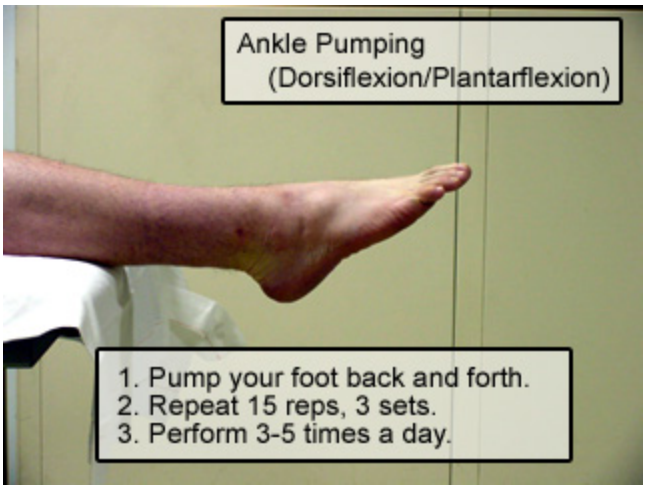
- Healing time is closely related to severity of sprain:

  - Grade I – 2-6 weeks
  - Grade II – 6-10 weeks
  - Grade III – 12-16 weeks
  - Syndesmosis Sprain ("High ankle sprain") – can take 4 to 6 months to heal.

♦ Treatment

- Rest – no running or jumping while the injury is healing
- Ice over the injury site for 20 minutes 2 times per day for the first 48-72 hours
- Compression (taping or compressive wrapping)
- Elevation of the injured ankle often and for as long as possible in the first 48-72 hours
- Anti-inflammatory medication (aspirin, ibuprofen, etc) may be helpful in reducing both pain and inflammation
- You may require an X-ray in severe injuries to exclude a fracture. If there is severe pain and severe swelling, and you are unable to bear any weight on the injured extremity after the injury, you should see your health care provider for evaluation and determination if an X-ray is required.
- Regain full range of motion of the ankle (depending upon severity of injury, range of motion exercises such as ankle pumping back and forth/up and down as well as side-to-side, moving the foot and ankle in circles, and outlining the capital letters of the alphabet using the foot can usually be initiated after 24-48 hours. **See Below**
- Ankle strengthening (may begin as range of motion improves and pain diminishes…usually a few weeks after injury) **See Below**
- Ankle proprioceptive training after strengthening has been initiated (balance exercises on the injured ankle…examples include balancing on the injured foot/ankle with eyes opened and eyes closed for 30 seconds at a time and repeating 3-5 repetitions several times per day. This can be progressed to single leg balance on the injured foot/ankle while tossing a basketball against a wall.) **See Below**
- Slowly progress back into jogging once you are symptom-free.

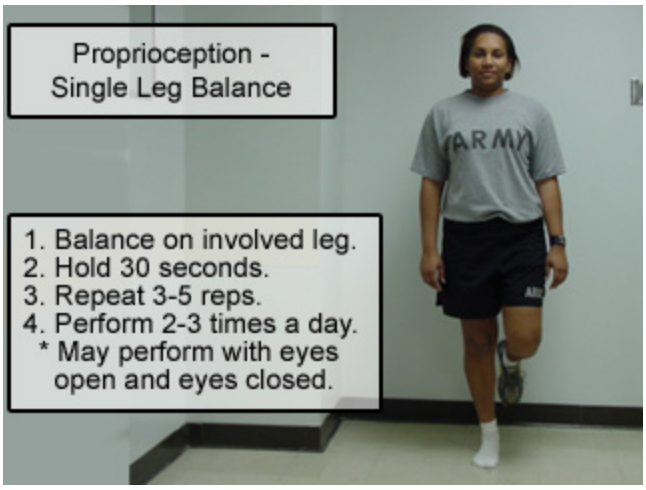

Ankle Alphabet
1. Draw the capital letters of the alphabet with your foot
2. Go through the entire alphabet twice
3. Perform 2-3 times a day


Ankle Pumping (Dorsiflexion/Plantarflexion)
1. Pump your foot back and forth.
2. Repeat 15 reps, 3 sets.
3. Perform 3-5 times a day.


Ankle Inversion/Eversion
1. Turn your foot inward (inversion) and outward (eversion).
2. Repeat 15 reps, 3 sets.
3. Perform 3-5 times a day.


Ankle Eversion Strengthening
1. Use a towel or elastic band to apply resistance.
2. Turn your foot outward (eversion) against the resistance.
3. Repeat 10 reps, 3 sets; Perform 3-5 times per day.


Ankle Inversion Strengthening
1. Use a towel or elastic band for resistance.
2. Turn your foot inward (inversion) against the resistance.
3. Repeat 15 reps, 3 sets; Perform 2-3 times per day.


Proprioception - Single Leg Balance
1. Balance on involved leg.
2. Hold 30 seconds.
3. Repeat 3-5 reps.
4. Perform 2-3 times a day.
* May perform with eyes open and eyes closed.